The Fire Fighter Gazette

Issue 8 **March 1997**

Interspiro Team Formed

An Integrated Product Team (IPT) was formed to validate reported deficiencies and identify potential problems with the recently fielded Interspiro One-Hour Duration SCBA. On 4 February 1997, the team met at Eglin AFB to begin the process. The following team members were present:

Wade Grimm, ASC/VXO (Team Leader)
Paul Sutphin, HQ AFCESA/CEX
Jack Remson, HQ AFCESA/CEX
Buddy Dennard, WR-ALC/LVF
Ernst Piercy, HQ USAFA/CEF

Background:

Contract award for the SCBA was in April, 1993.
Delivery began July, 1993; 5600 units were delivered in the first year.
16,038 total units were delivered (2400 to the US Army).
Only 7 formal complaints have been submitted to WR-ALC.

Discussion of the charter of this IPT ensued, including determining what is causing the problems with the Interspiro (training, maintenance or quality?).
It was pointed out that one of the first problems that needs to be addressed is that the installations that are having problems are not submitting MDRs to WR-ALC. The perception in the field is that the base will

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Need Your Help ....

As always, we would like to solicit your articles or questions, so here is how you can get in touch with us: 510 CES/CEF, 6202 Pine Drive, USAF Academy, CO 80840. Our phone numbers are: Commercial: (719) 333-2051, DSN 333-2051, and FAX: (719) 333-3740, DSN 333-3740. If possible, article submissions should include a Word For Windows file on floppy disk. Another way to get in touch with of us is through email:

ernst.piercy@usafa.af.mil

Using this method, you can attach your articles right to the message! We are also on the World Wide Web, and would love to have you visit us:

http://www.usafa.af.mil/fire-dept

A description of our department, vehicles, equipment, SOPs and many links are located on our page.

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Interspiro IPT

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look bad if a MDR is sent in. Mr. Grimm then discussed the blueprint of how the team should carry out the charter:

- Comparison of in-service vs. unused.
- Posi-check before and after use.
- Determine who is performing maintenance - how many fire fighters in the department are actually certified vs. who is working on them.
- Examine training and maintenance records.
- Interview personnel to determine what the major complaints are.
- Determine which other bases to visit.

A question and answer session was conducted with the Eglin fire fighters, followed by several practical evolutions. Eglin AFB SCBA POCs: Mr. **Tom Wade**, Mr. **Dale Mosby**.

Who does maintenance on the SCBAs? Only the trained technicians - five personnel are currently trained, 24 personnel are scheduled. 223 fire fighters are assigned.
What sort of problems are you experiencing? Most prevalent problem is a high pressure hose O-Ring failing as a result of *operator error* - trying to disconnect the hose while it is under pressure. This problem was recognized and corrected before the arrival of the IPT.
What is the frequency of your training on the SCBA? At least one hour per month, operator use and maintenance.
Is fit testing accomplished for all personnel? Yes, annual fit test is done by Bio-environmental.
Is the required quarterly cleaning being accomplished on the facepieces? Yes, the operators take it apart and clean it.
Who is responsible for ensuring the scheduled maintenance is conducted? The individual.

Two structural fires were simulated in the training area, to include extending hoselines, raising ladders, performing rescue operations, etc. The temperature was 68^0 F, the humidity was 83%. No operational problems were noted, with the following exceptions:

** One SCBA facepiece failed when the bypass leaked continuously. Investigation revealed that required maintenance had not been performed, causing the failure (lock-tite was not put on the screw inside the bypass valve assembly as required). Note: before the exercise, the fire fighter reported that his mask had "frozen up" on a previous exercise.
** On one unit, the first stage regulator was installed upside down (at the bottle), causing the air lines to "bind". No failure occurred.
All fire fighters were then given new (never used) SCBA to perform the same exercises. Two of the five fire fighters remarked that the new SCBA was easier to breathe with. After the exercises, the fire fighters were given the opportunity to provide feedback open forum:

- The SCBA is uncomfortable to wear over extended periods; may bruise the hip bone.
- When queried, fire fighters expressed full confidence in the reliability of the unit.

Mr. Wade flow tested the two SCBA that allegedly did not work as well versus two new ones; one performed fine, one required a slight adjustment. Mr. Wade also discovered three more units that required "lock-tite" at the regulator nut.

On the second day of the visit, the other operational shift performed similar exercises in the training area. The temperature was 59^0 F, the humidity was 94%. Again, no obvious operational deficiencies were noted. The following was observed:

- On one unit, the first stage regulator was installed sideways (at the bottle), causing the air lines to "bind". No failure occurred.
- During the wear of the new units, two of the five fire fighters reported that the SCBA was easier to breathe with. However, when placed on the flow test machine by Mr. **Dale Mosby**, no difference in performance was indicated.

Note: On this day, an additional test was performed - the five new (unused) SCBA were donned with the bypass operating for approximately four minutes. Moderate icing was observed on the exterior of the hoses with no loss in performance of the unit noted.
Again, after the exercises, the fire fighters were given the opportunity to provide feedback open forum:

- The airpack harness cannot be tightened sufficiently to provide the level of comfort desired.
- The airlines for the mask should be on the other side of the mask to align better with the air gauge.
- One fire fighter reported his mask "sometimes leaks" when he begins to sweat.
- The Savox units were constructed in a manner that caused the radio lines to be subject to excess wear and tear. The suggestion was made to shield them, or install larger lines.
- The pressure of the Savox on the head became uncomfortable during extended wear.

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- Some fire fighters expressed a desire for the fish net vs. the spider web face piece straps.
- The bottles were too large for confined space operations.
- More training to perform maintenance (level B) was requested.
- Ensure that at least one person is certified to level B when deployed to various contingencies.
- When queried, the fire fighters expressed full confidence in the Interspiro SCBA.

Dive Rescue

The Air Force Academy Fire Department (AFAFD) provides fire and rescue protection for one of the more unique missions of the Air Force. Situated in the Front Range of the Rocky Mountains, the 25 square mile Academy has challenges not seen at other installations. Because of its location, sudden and severe winter storms are normal. Snow storms come in over the mountains and can quickly dump several inches of snow on the surrounding areas without much warning. Interstate 25, the main north-south route through this part of the country, runs for almost eight miles through the Academy, and the AFAFD provides coverage to this busy stretch of highway.

One of the special services provided by the AFAFD is underwater rescue. There are several reservoirs and lakes situated on the Academy, including a nearby recreation area with three large lakes (also owned by the Air Force). With the numbers of residents and visitors using the facilities, the need to provide some sort of water rescue capability became evident a few years ago. Several members of the department are fully certified divers, and a rescue boat with a full compliment of dive rescue equipment is maintained in the fire station. The dive team trains regularly to maintain their special skills.

On 20 February 1997, the B-Shift firefighters were faced with a critical rescue situation that taxed their abilities to the maximum. The shift had responded to several emergencies during the day, and a brisk snowfall started in the afternoon. Road conditions deteriorated and numerous traffic accidents had fire units on I-25 for over two hours. The sixth accident call of the evening had companies working a single vehicle roll-over at Mile Marker 154. As the companies were preparing to leave the scene, a passer-by notified the rescue crew that a vehicle had been involved in an accident about ¼ mile north of their location and had driven off the interstate and into a body of water. This information was relayed to the Assistant Chief for Operations who transmitted an additional alarm for assistance.

Dive team responses are infrequent, and most of the team members were still in quarters at Fire Station 2 when the alarm tones sounded and dispatched them to a water rescue on the interstate! The team, as well as most of the other responders, were shocked to get dispatched to a highway for an underwater rescue. Forming quickly, the team loaded their equipment and preceded to the accident site. Due to the weather conditions, just getting to the site became an adventure and all responding units had to use extreme caution to arrive safely.

The first arriving unit was Heavy Rescue 3, a P-28 rescue truck. Following closely behind was an engine company on a P-24 that had been dispatched to an earlier accident. Both trucks had to travel off the interstate and over rough terrain to get to the accident site. The P-28 illuminated the area, and found a sizable body of water approximately ¼ mile off the interstate. They could barely see the outline of a vehicle in the water and still had air bubbles rising to the surface. The crews rigged safety lines to climb down the steep hill to the water's surface and checked to see if a rescue could be performed. Determining that it was unsafe to enter the water at that point, the dive team was again notified that they would have to make an emergency entry when they arrived on scene. At this point, the Incident Commander notified the *Colorado Springs Fire Department* to dispatch their dive team as a back-up. At that point, it was determined that the vehicle had driven through the Academy boundary fence and the accident was actually on city property. The city dispatched Heavy Rescue 2 with the dive team, District Chief 2 and Trauma Squad 7 to the site. Four wheel drive ambulances from the *Tri-Lakes Fire Department* and the *Air Force Academy Hospital* were also now on scene to provide medical attention and to provide rehabilitation area for the divers. The accident site quickly filled with emergency vehicles as efforts were underway to rescue the car's occupants.

Two divers from the AFAFD donned their dry suits and SCUBA and made their way to the pond. All access to the water had to be made on ropes due to the incline of the hill surrounding the water. The two divers found the vehicle but were unable to open the doors. Instead, they secured a chain around the rear of the vehicle so that the P-24 winch could pull the car from the water (the vehicle had lost electrical power and the doors could not be opened). When the vehicle was raised out of the water, crews had to force entry through the windows to remove the two occupants. Because this was considered a cold water drowning, advanced life support (ALS) procedures were initiated on the occupants. ALS continued for over an hour at the Trauma Center, but both victims were pronounced dead at the hospital.

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Dive Rescue ...

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The AFAFD dive team had trained to performed a rescue on the Academy proper and was familiar with the various bodies of water on the installation. No one on duty even knew this body of water existed. It was truly by chance that the passer-by followed the vehicle until it disappeared or the vehicle may never have been found. The circumstances of why the vehicle ended up in the water are still unknown. We do know this much: the vehicle was southbound on the interstate when it lost control and crossed into the northbound lane when it struck a pick-up truck almost head on. The people in the pick-up were not injured, and the occupants of the car even spoke to them. But then the vehicle left the scene of the accident and headed off the intestate. The vehicle, a Dodge Stealth, traveled over rough terrain in a blinding snow storm and ended up in this pond. The driver did not have any outstanding warrants, had a valid drivers license and had full insurance on the vehicle. As of this writing, the toxicology reports are not available to determine if drugs or alcohol were involved.

The shift still was not over, and three more accidents occurred on the interstate that evening. While responding to a roll-over, another vehicle rolled over almost in front of the responding engine company. The last accident was a head-on collision, which required two victims to be backboarded and transported to the trauma center. In all, there were 14 responses, which included two fatalities and several full spinal immobilizations. Many of these emergencies occurred in the midst of a winter storm with hazardous road conditions. Through it all, there were no injuries to any firefighters. This was a busy shift, with several critical incidents occurring, and yet the professionalism of the Air Force Academy fire fighters provided the best care to its customers in the finest tradition of Air Force Fire Protection.

Contributed by Assistant Chief James Rackl

From the archives of the Air Force Academy 911 Center:

Had a 911 hang-up call this evening. Apparently the Mother had taught her daughter how to use 911 during Emergencies. Tonight the little girl wanted Macaroni & Cheese for dinner, but her Mom said "No". The little girl deemed this to be an emergency so she dialed 911. We didn't respond, but we offered to send over some Macaroni & Cheese ....

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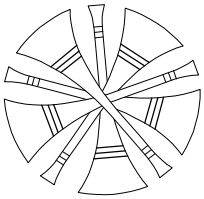
Fire Folks



Lots of movement within fire protection this time around. Thanks to the CAREERS folks for providing most of the information!

Terry Stemple, Chief of AF Space Command
Rodney Wheeler, Asst Chief, Mountain Home AFB
James O'Neal, Asst Chief, Selfridge ANGB
Joseph McKeon, Asst Chief, Homestead AFB
Donald Prather, Asst Chief, Homestead AFB
Pinero Olmeda, Asst Chief, Lakenheath AB
Raymond Stokes, Fire Chief Lackland AFB
Paul Garcia, Asst Chief, Kirtland AFB
James Gonzales, Asst Chief, Kirtland AFB
Albert Hornung, Asst Chief, RAF Alconbury
Joe Ybarra, Fire Chief, Edwards AFB
Hubert Dukes, Fire Chief, Patrick AFB
Ken Miller, Fire Chief, Eilson AB
Christopher Lusk, Asst Chief, Randolph AFB
Tommy Kennedy, Asst Chief, Vandenberg AFB
Robert Schultz, Fire Chief, Hill AFB
Philipe Boyer, Fire Chief, Westover AFB
James Didier, Asst Chief, Whitemant AFB
David Martin, Asst Chief, Buckley ANGB
James Enterline, Asst Chief, Niagara ARS
Mark Lawler, Fire Chief, Hickam AFB

Departure - Lackland's Fire Chief, James A. Garrett retired 22 Nov 96 after 48 years federal fire service. Chief Garrett was Lackland's Chief for 13 years.

Death Notices

Dan Martindale passed away on 12 January, 1997 in Dallas City , Illinois. Dan was the Chief of the Fire Prevention Section for many years at Tyndall AFB, Florida. (submitted by Mr. Paul Sutphin)

MSgt Jeffrey Rowland was medically retired from Dover AFB less than a year ago due to cancer. On 21 February 1997, the Lord took him and eased his pain. Jeff was a former fire school instructor and was known by many. He was laid to rest on 25 February, in Roanake, Virginia where he and his wife, Roz, have lived since his retirement. (submitted by CMSgt LaConte)

Winds of Change

Article written by Chief Thomas Siegfried (ret)

Change, change, change --- when will it ever stop? Reinventing, rightsizing, downsizing re-engineering, restructuring. How will the American fire service cope with the changes that lie ahead? On a trip to New Zealand last year to speak at South Pacific Fire 1996, I saw a national fire service implementing what many of us have only talked about in the United States.

Numerous threats face our fire service, and in many cases these are becoming reality. Fire departments have faced privatization, and some have lost that battle. Others have had to deal with staffing reductions or reduced service levels without the customer even knowing it was happening. Why? Because costs continue to increase while revenues and funding levels remain stagnant.

For many years we have discussed the need to move the fire service to a more proactive, less reactive stance. Some fire departments have increased public education efforts, while others started swim safety programs or opened fire stations to children or others in need. Many more, unfortunately, remain stuck in traditional roles and attitudes.

My trip to New Zealand was actually my second trip overseas on which I observed a different approach to providing emergency services. The time has come for us to take a hard look at what others are doing, to benchmark with these international groups and determine how we can apply some of their methods. I believe we can use some of the principles described by Mitchell Brown.

On both trips, to Japan and to New Zealand, I saw the development of community fire safety teams. In Japan, the teams are separate and in addition to operation and other emergency services; in New Zealand a more integrated approach is being implemented. Either way, this is a concept that I believe could work in the American fire service.

As Mitchell Brown describes, a complete restructuring of their national fire service is taking place. After reading his article, many of you might say, "Yeah, we've been there, done that," but I couldn't disagree more. After 25 years in the fire service, I can honestly say that many of us have talked about these changes, but few have actually taken steps to implement them.

If the fire service in this country is going to be more proactive, can it maintain the status quo, with existing shift hours (24/48), traditional apparatus staffing, resources deployed for reactive services and separate divisions to handle separate assignments?

We can't stagnate and survive. We must look for significant changes that will make us more efficient and productive; then we might just stand a chance. What harm would there be in looking at what our colleagues in New Zealand are doing and possible learning from them?

New Zealand Chief Executive Maurie Cummings and National Commander Kerry Everson should be given a lot of credit for their determination to make the plan work. I can't imagine our president calling for an external review of our nation's fire service. And if he did, would he ever order such a controversial implementation? I think not! That's why I believe it's so critical for each of you to look closely at these innovative approaches and how they could help us with the changes we're facing.

Do you think the fire service in the United States could implement community fire safety teams using existing personnel, changing the traditional shift hours, placing our emphasis on injury and loss prevention, and improving on our efficiency and productivity? I truly believe the New Zealand plan has merit and could be part of the future of the fire service in this country: Doing as much more effective job with educating the public, taking an increased responsibility with EMS transport, increasing our role in managed health care and finally filling the emergency management role for each of our communities.

Changes like these could be instrumental in setting the future course for the fire service in the united States. Look closely at the information Mitchell Brown has presented and draw your own conclusions, but keep your eyes and your mind wide open.

Numerous threats face our fire service, and in many cases these are becoming reality. Fire departments have faced privatization, and some have lost that

A fire fighter greets a visitor at the Air Force Academy's Fire Station #2.